



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

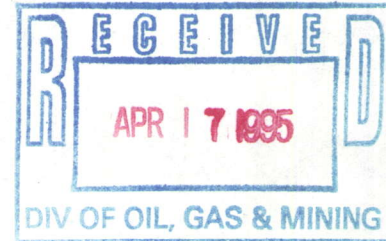
Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Don A. Ostler, P.E.
Director

288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870
(801) 538-6146 Voice
(801) 538-6016 Fax
(801) 536-4414 T.D.D.

April 3, 1995



Mr. Dave I. Hodson
Barneys Canyon Mine
8200 South 9600 West
Bingham Canyon, Utah 84006-0311

Re: Approval of the Proposed Heap Leach Pad
BC-4 and BC-5. Ground Water Permit No.
UGW350001

Dear Mr. Hodson:

We have reviewed the plans for the referenced project prepared by your staff and your consultants Ford, Bacon & Davis Inc. We received this information on March 2, 1995.

This project is for construction of two additional heap leach pads. We approve the design criteria as outlined in the issued construction permit dated, March 24, 1989, for the three previous heap leach pads, viz., BC-1, 2 and 3, with the following modifications:

1. *Leak detection system will be constructed of 3-inch diameter Schedule 80 polyvinylchloride (PVC) pipes and spaced at 200 foot intervals.*
2. *Each leak detection line will be placed against a clay berm. The berm and under the leak detection pipe will be lined with synthetic liner. A gravel pack will be placed around the leak detection pipe and wrapped with filter fabric.*
3. *The perimeter around the pads will be double lined with 60 mil HDPE liner extending under the heaped ore. A separate leak detection/collection system will be installed between the liners.*

These modifications have been incorporated in the plans.



Mr. Dave I. Hodson
April 3, 1995
Page 2

We note that you have agreed to monitor settlement of newly constructed heap leach pads by installing a settlement measuring device.

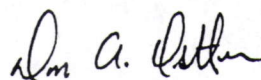
Based on our review, the proposed heap leach pads No. BC-4 & BC-5 comply with Utahs Water Quality Rule, (R317, Utah Administrative Code) for the stated use, and are hereby approved in accordance with Part 1, Paragraph D.2 of the referenced permit.

However, we find from our review that the current monitoring well network for the facilities does not provide sufficient coverage for the proposed expansion. From the information we have, as a minimum a new well needs to be located at an appropriate downgradient point east of pad BC-4. It appears that well BC-282 covers Pad BC-5. Please submit for approval a proposed drilling and logging schedule for installation of the new well. The ground water permit will need modifying to incorporate several changes in your operation, such as the addition of the two pads, minor changes in your liner and leak detection systems and the addition of a new monitoring well. The above changes in the permit will not need to be public noticed as the groundwater permit provided for the new pads and for additional monitoring wells. Also, the above modification are minor permit changes.

While this action grants approval to begin construction of the pads, operation may not commence, until the necessary well or wells are approved, installed and authorization under the ground water permit is issued.

If we can be of further assistance, please contact me or Lyle Stott of my staff.

Sincerely,



Don A. Ostler, P.E.
Director

DAO:LWS:MGC

cc: W. Terry Sadler - Salt Lake City/County Health Department
Wayne Hedberg - Division of Oil, Gas and Mining

N:BC-PAD4&5.AP:
FILE:BARNEY'S CANYON